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RAW SEQUENCE LISTING DATE: 06/09/2004
PATENT APPLICATION: **US/09/936,367A** TIME: 15:44:11

Input Set : **D:\1SEQUENCE LISTING expression of proteolytic enzymes.ST25.txt**

Output Set: **N:\CRF4\06092004\I936367A.raw**


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  3 <110> APPLICANT: Affolter et al.,
  5 <120> TITLE OF INVENTION: Expression of proteolytic enzymes in koji mold in the presence of
  6       carbon sources
  8 <130> FILE REFERENCE: 112843-029
 10 <140> CURRENT APPLICATION NUMBER: us 09/936,367A
 11 <141> CURRENT FILING DATE: 2001-09-11
 13 <150> PRIOR APPLICATION NUMBER: 99 104 923.0
 14 <151> PRIOR FILING DATE: 1999-03-11
 16 <160> NUMBER OF SEQ ID NOS: 2
 18 <170> SOFTWARE: PatentIn version 3.2
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 4238
 22 <212> TYPE: DNA
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 30 gcgtggtcga agaacgacac ggaagaagcc ccggaagacg ccttctctag gcaacaaatg    180
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 34 tcatcagaac agaataaggg gaatttttga ttagcaaata acaataataa ttatacaaaa    300
 36 aaacaaataa aaaaatttag gggactcccc acccgctgta atcctgggtg tatctcaaag    360
 38 caaagcaggc gatctggggg gagcacgttc ttttttttte ttttctcttt tttctatttt    420
 40 ttttttttte tttattttag gtctatgcct ttttttttct tttccttttt ttttttttte    480
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 50 ctctcccttt cgacaaattg ttgcttgact acatccatct cgggttacct acttacagta    780
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 56 caaggcttgt gatactcttg cggtgctcgt tcatcaacta gtactttgcc aagagcaagt    960
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 86 catctcaggt tgagcgtgat gaacaacatt ttgggttcca cgctggtcca cgtaatcacc   1860
 88 atttgttcgc ctcgcgtcac cacaccggtc gtggcctgcc ttccctttca gcgtacgcca   1920
 90 tctcgcacag catgagccgt tctcactttc acgaggacga ggatggttac actcatcgcg   1980
 92 tcaagcgctc aaggcctaac tcaccaaact cgaccgctcc gtcctcaccg actttctctc   2040
 94 acgactctct ttccccaacg ccagaccaca ctccgttggc aacccctgct cattcgccac   2100
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171 <212> TYPE: PRT
172 <213> ORGANISM: Aspergillus oryzae
174 <400> SEQUENCE: 2
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184 Lys Ala Pro Ser Thr Pro Ser Ser Thr Gln Ser Asn Ser Thr Met Ala
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188 Ser Ser Val Ser Leu Leu Pro Pro Leu Met Lys Gly Ala Arg Pro Ala
189     50                  55                  60
192 Thr Glu Glu Ala Arg Gln Asp Leu Pro Arg Pro Tyr Lys Cys Pro Leu
193 65                  70                  75                  80
196 Cys Asp Arg Ala Phe His Arg Leu Glu His Gln Thr Arg His Ile Arg
197                 85                  90                  95
200 Thr His Thr Gly Glu Lys Pro His Ala Cys Gln Phe Pro Gly Cys Thr
201             100                 105                 110
204 Lys Arg Phe Ser Arg Ser Asp Glu Leu Thr Arg His Ser Arg Ile His
205         115                 120                 125
208 Asn Asn Pro Asn Ser Arg Arg Ser Asn Lys Ala His Leu Ala Ala Ala
209     130                 135                 140
212 Ala Ala Ala Ala Ala Ala Gly Gln Gly Gln Glu Asn Ala Met Val Asn
213 145                 150                 155                 160
216 Val Thr Asn Ala Gly Ser Leu Met Pro Pro Pro Thr Lys Pro Met Thr
217                 165                 170                 175
220 Arg Ser Ala Pro Val Ser Gln Val Gly Ser Pro Asp Val Ser Pro Pro
221             180                 185                 190
224 His Ser Phe Ser Asn Tyr Ala Gly His Met Arg Ser Asn Leu Gly Pro
225         195                 200                 205
228 Tyr Ala Arg Asn Thr Glu Arg Ala Ser Ser Gly Met Asp Ile Asn Leu
229     210                 215                 220
232 Leu Ala Thr Ala Ala Ser Gln Val Glu Arg Asp Glu Gln His Phe Gly
233 225                 230                 235                 240
236 Phe His Ala Gly Pro Arg Asn His His Leu Phe Ala Ser Arg His His
237                 245                 250                 255
240 Thr Gly Arg Gly Leu Pro Ser Leu Ser Ala Tyr Ala Ile Ser His Ser
241             260                 265                 270
244 Met Ser Arg Ser His Phe His Glu Asp Glu Asp Gly Tyr Thr His Arg
245         275                 280                 285
248 Val Lys Arg Ser Arg Pro Asn Ser Pro Asn Ser Thr Ala Pro Ser Ser
249     290                 295                 300
252 Pro Thr Phe Ser His Asp Ser Leu Ser Pro Thr Pro Asp His Thr Pro
253 305                 310                 315                 320
256 Leu Ala Thr Pro Ala His Ser Pro Arg Leu Arg Ser Leu Gly Ser Ser
257                 325                 330                 335
260 Glu Leu His Leu Pro Ser Ile Arg His Leu Ser Leu His His Thr Pro
261             340                 345                 350
264 Ala Leu Ala Pro Met Glu Pro Gln Pro Glu Gly Pro Asn Tyr Tyr Ser
265         355                 360                 365
268 Pro Ser Gln Ser His Gly Pro Thr Ile Ser Asp Ile Met Ser Arg Pro
269     370                 375                 380
272 Asp Gly Thr Gln Arg Lys Leu Pro Val Pro Gln Val Pro Lys Val Ala
273 385                 390                 395                 400
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276 Val Gln Asp Met Leu Asn Pro Ser Ala Gly Phe Ser Ser Val Ser Ser
277                 405                 410                 415
280 Ser Thr Asn Asn Ser Val Ala Gly Asn Asp Leu Ala Glu Arg Phe
281             420                 425                 430
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VERIFICATION SUMMARY DATE: 06/09/2004
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